HANDS ON MATERIALS PROVIDE SCAFFOLDING

FOR BUILDING PHONEMIC and PHONOLOGIVAL AWARENESS

By Sally Grimes

Why provide "scaffolding" when developing Phonological Awareness?

With regard to construction projects, scaffolding provides needed support until a structure is able to stand on its own. Similarly, when a student is learning a new skill, he/she often needs support until he/she attains mastery.

Depending upon the child and the nature of the task to be learned, the intensity and duration of the support will vary. The scaffolding will gradually be removed as the student is able to "stand on his own" and execute the skill with ease and/or demonstrate knowledge.

Often the most helpful kind of scaffolding seems to be that which transforms an abstract concept (like language) into something concrete and thus making it more memorable and easier to grasp. For example, when students can actually touch objects such as tokens or sponges and move them as they say the sounds or syllables in a word, it appears to help them understand phonological components in a word at a deeper level. This often helps the concept to "stick" better than if there were no tangible way of understanding that words are made up of sounds and syllables.

As the student develops phonemic awareness, syllable awareness, etc., at a particular level, the scaffolding can be dismantled. However, each time the level of difficulty is increased or a new and more complex task is introduced, the scaffolding should be reintroduced.

The ultimate goal of taking a student from speech to print, of course, is to have the phonological components of a word correspond to orthographical components (the print or spelling patterns) so that decoding and encoding can become automatic.

DIFFERENTIATING THE LENGTH OF THE UTTERANCE BY USING GRADUATED SIZES OF MANIPULATIVES (S. Grimes)

Struggling readers often get the concept of phonemes mixed up with the concept of syllables when doing phonological awareness tasks. It is helpful, therefore, to teach syllable awareness and sound (phoneme) awareness in separate lessons until there is sufficient understanding of each.

In addition, it helps students to learn the difference between hearing the number of sounds versus the number of syllables in a word if the teacher uses different sized objects that get increasingly larger to correspond with the increasing size of the utterance. (phonemes are smallest, then syllables, and then words.)

With this in mind, one can see the benefit of having school-wide consistency with regard to this principle, so that when students change teachers or grades, they are accustomed to using certain kinds of representational objects to denote phoneme, syllable, or word awareness. The following "general principles" can apply:

Phonemes*:

- -represented by round, cube shaped, or square objects
- -unifix cubes, sponge bits, transparent "bingo chips" for use on an overhead projector, poker chips, small square or round shapes, etc.
- -roughly one inch square or round for student use (larger if being used in front of a whole class)

Syllables*:

- -represented by oblong (horizontally) rectangles that are longer than the phonemes are wide
- -cut up sponges, strips of laminated paper or sheets of colored foam, colored transparent strips, flat kitchen scrub pads, felt, etc.
- -roughly two inches long and 3/4 inch wide.

Words*:

- -oblong rectangles that are cut longer horizontally & are longer than the syllables
- -sponges, strips of card stock, foam or transparencies, flat kitchen scrub pads, etc.
- -roughly 4 inches long and 3/4 inch wide.

PROVIDING "BAGGIES" OF MATERIALS FOR EACH CHILD'S USE IN SMALL GROUPS (S. Grimes adapted from Bray)

It is important for children to have their own materials that can be assembled and help students apply the above principles.

Each child should have a baggie (which seals) to which the manipulatives are gradually added, teaching structure and orderly "baggie behavior" as time unfolds. These can be made by high school students needing "service hours" or girl scouts, etc. EACH BAGGIE SHOULD CONTAIN:

- 1. Segmenting strip: 4-5 inches X 1 inch strip with 4-6 round stickers depending upon ability of student) spaced evenly. These can serve as scaffolds to help the child spell as he slowly feels a sticker for each sound. (Laminating diminishes the tactile feedback.)
- 2. Two pieces of straws: One should be approximately two inches long (to hold up when student hears a short word) and the other approximately 6 inches long (to hold up when student hears a "big long word". (This can be adapted for older children who need to hear more subtle differences such as those between the word "clasp" and "clasped".)
- 3. Colored stars or foam pieces or unifix cubes to represent phonemes (see above information*)
- 4...Colored strips to represent syllables and words. (see above information*)

Another example of applying this principle of using graduated sizes of materials to represent larger and larger chunks of sound would be using increasingly larger markings or "dashes" to denote length of utterance when having students represent sounds, syllables or words as they write. That is, a quick short dash would represent a phoneme (- - - for the sounds in cat, for example) and longer dashes would represent syllables. (--- --- to denote the three syllables in the word "fantastic, for example). This idea of "dashing sounds" can be used in conjunction with a spelling test where students are asked to write the dashes for each word as well as spelling the word, or in small groups with each child "dashing sounds" on individual white boards. (C. Bray)

WHY IS IT IMPORTANT FOR CHILDREN TO HAVE THEIR OWN MANIPULATIVES? (S. Grimes)

The more that children can use their senses and be engaged, the more likely it seems to be that the concept will have meaning to them. Materials that lend themselves to individual use are described herein.

In addition, if they have their own materials and these materials are kept accessible and labeled with their names, it is easier for the students to quickly grab them so time is saved (rather than taking time to distribute them). Also, if students each have individual white boards with a dry erase marker attached with a string, they can serve as portable desks and students can be quickly gathered for differentiated instruction in various places of the room. (A piece of felt works well as an eraser.)

In addition to having baggies for each child in a small group, the objects described below can be manipulated by the student during a variety of lessons involving sounds, syllables, words.

Magnetized Objects

Magnetic tape or strips can be glued onto the back of almost any manipulative or material, such as felt, colored foam, stickers, cardstock, etc.. If one does not have a magnetic board to which the manipulatives can be affixed, a large oil drip pan from an automotive store (propped up on the easel), a cookie sheet or certain teachers' desks can be used.

White Boards:

-8.5 X 11 inch white board - from math program, bought at teacher stores or ordered from the website for School Specialty: www.schoolspecialty.com

"School Smart -Item #30357198, Catalog: "EE (Education Essentials) Page 318. - Pack of 10 9X12 inch white boards \$19.95 - Sometimes school discounts apply for a lower rate.)

(Materials continued - S. Grimes)

Puppets:

- -Have each student have his/her own puppet.
- -Puppet should have a mouth that opens and closes very clearly.
- -Puppet should open mouth for each phoneme or syllable or word.
- -One to one correspondence (mouth opening to sound emitted) must be explicitly taught and ensured.
- -Puppet can be a robot who "talks funny" as they speak in segments.

For SEGMENTING and BLENDING, teacher first models segmenting. Student then blends OR teacher says a word normally and asks student to segment and "pretend to sound like a robot". Example:

Teacher: "This puppet is saying /b//i//g/. What is he trying to say?" Student: "big"

Then reverse roles and ask student to "talk funny", segmenting the word.

Hole Puncher:

Student punches index card with hole puncher, once for each phoneme or syllable.

Die or Playing Card:

Student rolls the die or draws a card. Student provides a word with the same number of phonemes (or syllables or words for a sentence) as indicated on the die or card. **Note:** Only use cards numbered as high as appropriate for student's skill level. Do not use face cards.

Optional: Birthday candle to be used when it is someone's birthday (or to pretend it is) as a practice activity for phonemic awareness. Example: Singing the Happy Birthday Song and substituting the first phoneme in the student's name for the first phoneme in each syllable of the song. Eg. Mappy Mirthmay, Moo Moo. Etc. (for "Margaret")

Manipulatives-continued (S.Grimes)

Elastic:

One inch wide elastic onto which one inch paper squares are attached. Each is marked with the letters in words that the child has been taught. The letters can be attached to the elastic band with Velcro, glue, or staples, so that the paper squares touch. Student can segment and blend the letters in a word by stretching or releasing the elastic.

Paint Stirrers with Colored Clothespins: (Candice Bray)

Paint stirrers can easily be attained (for free!) at hardware stores, etc. Colored clothespins can be bought very inexpensively (\$1 for three sets) at A.C. Moore, Job Lot, or a Dollar Store.

The teacher provides a word that has sounds in it that are to be practiced. Start with two phoneme words, then build as the student is learning more. The student will place a clothespin onto the stirrer for each sound in the word. Students are asked to use a different color for each sound. Each time they assemble the clothespins for a given word is independent from another time they assemble the clothespins representing another word. In other words, they do NOT have to remember that, in the previous word, the /d/ sound was blue. That would put a "memory load" onto the task, which is not desirable.

The clothespins should be of at least four different colors with ANY one of the color repeated if desired, so that, for example, if the word is "dad", the sound for "d" (/d/) would be repeated at the beginning and end of the paint stirrer.

Manipulatives-Continued (Sally Grimes)

Paint Stirrers with Poker Chips: (Candice Bray)

Use different paint stirrers (from those above) and poker chips of at least four different colors. Cut Velcro strips into small squares and mount onto the stirrer and onto the back of the poker chips. (Buy the kind of Velcro that has one side that sticks to other surfaces.)

This can be used in ways that are similar to the "Paint Stirrers with Colored Clothespins" activity.

Mirror:

Small hand mirrors often help students who need to see that their mouths are in various positions as they learn to say various sounds.

Foam letters or other large letters:

When children are having difficulty distinguishing the letters or forming them as they write, place two similar looking letters (Upper Case Q and O) in a bag for them to feel and describe orally in detail

Transparent colored squares and overlying letters:

Blank colored squares (one inch square) can be cut from sheets of colored overhead projector transparency sheets or similar material. Letters can be printed on clear transparency sheets directly from the computer or copied from other source. Blanks (for phonemic awareness) and letters (for phonics) can be used together as student is moving from PA to Phonics.

Sally Grimes - Revised 12-06

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